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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/982,493	10/18/2001	Kuen-Yuan Hwang	56629 (71987)	7476

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EDWARDS & ANGELL, LLP
P.O. BOX 55874
BOSTON, MA 02205

EXAMINER	
DELCOTTO, GREGORY R	

ART UNIT	PAPER NUMBER
1751	

DATE MAILED: 06/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/982,493	HWANG ET AL.	
	Examiner	Art Unit	
	Gregory R. Del Cotto	1751	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 March 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-26* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-26 are pending. Applicant's arguments and amendments filed 3/15/04 have been entered.

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Objections/Rejections Withdrawn

The following Objections/Rejections as set forth in the Office action mailed 4/30/03 have been withdrawn:

The rejection of claims 1-26 under 35 USC 112, first paragraph, has been withdrawn.

The rejection of claims 1-26 under 35 USC 112, second paragraph, has been withdrawn.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1, 2, 14, and 15 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Farkas et al (US 4,785,073).

Farkas et al teach a series of melamine-phenol-formaldehyde resoles for pressure-free to low pressure, low/medium temperature conversion into moulded product. The molar ratio of melamine:phenol is the range 1:4.7 to 1:0.29; for each mole of melamine there are 1.5 to 3 moles of formaldehyde and for each mole of phenol, there are 1.2 to 2 moles of formaldehyde. The resin compositions may contain fillers/reinforcing fibers, glycol and water, curing is at or near neutral pH and may be accelerated by the use of boric oxide or acid and also by microwave heating. See Abstract. The moulding compositions may contain fillers such zinc oxide, magnesium carbonate, magnesium hydroxide, clays, mica, talc, silica, etc. The resin system may

also contain reinforcing fibres such as glass, nylon, cellulose, etc. See column 4, lines 12-40.

Curing, after shaping, of the moulding compositions may take place in closed or open heated moulds, with or without the application of pressure. Alternatively, curing may take place by stoving the shaped article in a thermostatically-controlled circulating air oven, or by means of microwave or high frequency.

Specifically, Farkas et al teach melamine-phenol-formaldehyde resole of molar ratios melamine-phenol-formaldehyde 1.0:3.4:8.4 containing 10% by weight of dipropylene glycol and approximately 15% by weight of water: 100 parts by weight dipropylene glycol:12 parts by weight water:10 parts by weight pH adjusted to 6.0 with butyl acid phosphate. See column 6, lines 60-69.

Accordingly, the broad teachings of Farkas et al anticipate the material limitations of the instant claims.

Alternatively, even if the broad teachings of Farkas et al are not sufficient to anticipate the material limitations of the instant claims, it would have been nonetheless obvious to one of ordinary skill in the art to arrive at the claimed solids content of composition in order to provide the optimum properties to the composition since Farkas et al teach that the amount of melamine, phenol, and formaldehyde added to the composition may be varied.

Claims 3-13 and 16-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Farkas et al (US 4,785,073).

Farkas et al are relied upon as set forth above. However, Farkas et al do not specifically teach a composition having the specific shape containing a thermoset resin, a methylol containing resin having the specific solids content, and the other requisite components of the composition in the specific proportions as recited by the instant claims.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to formulate a composition having the specific shape containing a thermoset resin, a methylol containing resin having the specific solids content, and the other requisite components of the composition in the specific proportions as recited by the instant claims, with a reasonable expectation of success and similar results with respect to other disclosed components, because the broad teaching of Farkas et al suggest a composition having the specific shape containing a thermoset resin, a methylol containing resin having the specific solids content, and the other requisite components of the composition in the specific proportions as recited by the instant claims.

Claims 1, 2, 14, and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by or, in the alternative, under 35 USC 103(a) as obvious over Gunther et al (US 5,021,474).

Gunther et al teach moulding compositions comprising a melamine/formaldehyde resin, a melamine/phenol/formaldehyde resin or a mixture of said resins, organic and/or inorganic fillers, a lubricant, and 0.1 to 2% by weight, based on the total composition, of 3-chloro-1,2-propanediol as latent hardener are suitable for the production of mouldings

by injection moulding. See Abstract. The moulding compositions preferably contain 35 to 70% by weight of the of the melamine resin based on the total weight of the composition. Suitable filler materials include would flour such as cellulose, calcium carbonate, alumina, silicates, glass beads, etc. See column 2, line 30 to column 3, line 15. Suitable lubricants include monohydric alcohols, polyhydric alcohols, etc. See column 3, lines 10-25.

Accordingly, the broad teachings of Gunther et al anticipate the material limitations of the instant claims.

Alternatively, even if the broad teachings of Gunther et al are not sufficient to anticipate the material limitations of the instant claims, it would have been nonetheless obvious to one of ordinary skill in the art to arrive at the claimed solids content of composition in order to provide the optimum properties to the composition since Gunther et al teach that the amount of melamine, phenol, and formaldehyde added to the composition may be varied.

Claims 3-13 and 16-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gunther et al (US 5,021,474)

Gunther et al are relied upon as set forth above. However, Gunther et al do not specifically teach a composition having the specific shape containing a thermoset resin, a methylol containing resin having the specific solids content, and the other requisite components of the composition in the specific proportions as recited by the instant claims.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to formulate a composition having the specific shape containing a thermoset resin, a methylol containing resin having the specific solids content, and the other requisite components of the composition in the specific proportions as recited by the instant claims, with a reasonable expectation of success and similar results with respect to other disclosed components, because the broad teaching of Gunther et al suggest a composition having the specific shape containing a thermoset resin, a methylol containing resin having the specific solids content, and the other requisite components of the composition in the specific proportions as recited by the instant claims.

Claims 1, 2, 10, 14, 15, and 23 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Schmidt-Hellerau et al (US 4,978,711).

Schmidt-Hellerau et al teach aqueous aminoresin solutions for low-formaldehyde surface bonding, based on condensates of melamine, urea, phenol and formldehyde having a molar ratio ofr from 1.4 to 1.8 moles of formaldehyde, from 0.04 mole to 0.1 mole of melamine and from 0.015 to 0.04 mole of phenol per mole of urea, relative to the total amount of the aminoresin which are obtainable by mixing from 20 to 40% by weight of melamine/urea/phenol/formaldehyde condensate with from 60 to 80% by weight of a urea/formaldehyde condensate. See Abstract. The aminoresin mixture has a solids content of from 60 to 80. See column 2, lines 35-50.

Accordingly, the broad teachings of Schmidt-Hellerau et al anticipate the material limitations of the instant claims.

Alternatively, even if the broad teachings of Schmidt-Hellerau et al are not sufficient to anticipate the material limitations of the instant claims, it would have been nonetheless obvious to one of ordinary skill in the art to arrive at the claimed solids content of composition in order to provide the optimum properties to the composition since Schmidt-Hellerau et al teach that the amount of melamine, phenol, and formaldehyde added to the composition may be varied.

Response to Arguments

With respect to Farkas et al, Gunther et al, and Schmidt-Hellerau et al, Applicant states that none of these references disclose or suggest that the resins disclosed therein are suitable for cleaning molds. In response to applicant's arguments, the recitation "for cleaning molds" has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951). Additionally, note that each of the references are drawn to molding compositions of some kind and are related to Applicant's field of endeavor.

Additionally, with respect to Farkas et al and Gunther, Applicant states that neither reference teaches that the resin composition has a solids content of at least 75% by weight as recited by the instant claims. In response, note that, the claims requires that the "at least one methylol-containing amino resin" has a solids content of at least 75% and not the resultant composition as a whole. The Examiner maintains that the compositions of Farkas et al and Gunther suggest at least one methylol-containing amino resin having a solids content of at least 75%; theoretically, under a reasonable claim interpretation, one could have 10% of such a resin as long as 75% was a solid. See page 4, lines 15-25 of the specification. Additionally, the Examiner asserts that Farkas et al, Gunther and Schmidt-Hellerau teach the same methylol-containing amino resin as recited in the specification on page 3, lines 4-10. The Examiner sees no distinction between the amino-resins disclosed in these references and those listed on page 4, lines 15-25 of the specification.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory R. Del Cotto whose telephone number is (703) 308-2519. The examiner can normally be reached on Mon. thru Fri. from 8:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra Gupta can be reached on (703) 308-4708. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Gregory R. Del Cotto
Primary Examiner
Art Unit 1751

GRD
June 1, 2004